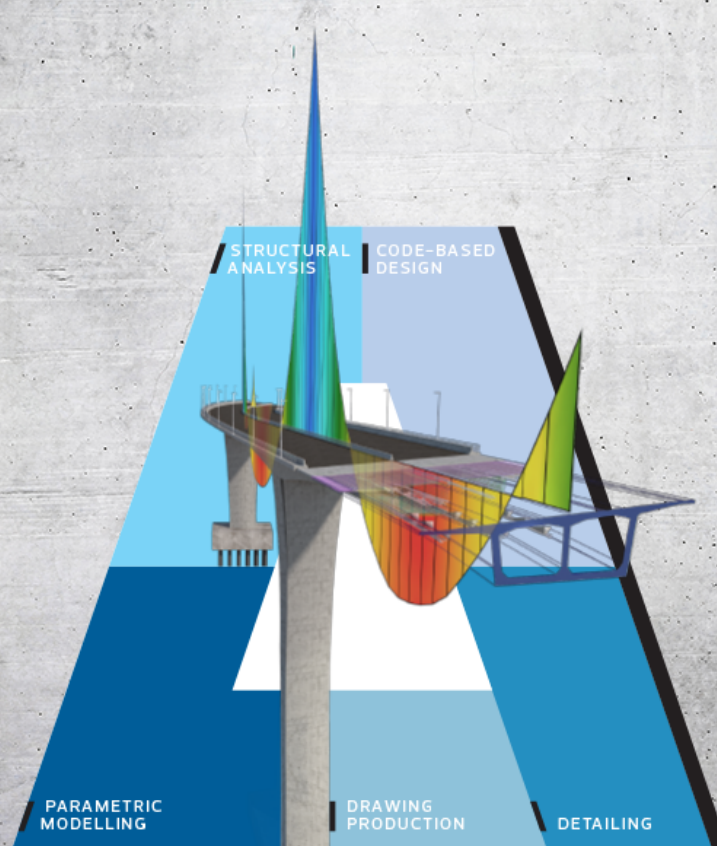


ALLPLAN BRIDGE 2021



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Allplan Bridge 2021 links Structural Analysis, Design and Detailing

New version maps complete BIM process for bridge projects for the first time

Munich, October 8, 2020 - ALLPLAN today presented Allplan Bridge 2021. The new version enables bridge engineers to work with **one single solution from the creation of a parametric 4D model to structural analysis, reinforcement design and detailing**. In addition to improved modeling functionality and the consideration of earthquake effects, code-based design according to Eurocode is now available as a link between structural analysis, design and detailing. Allplan Bridge 2021 thus **maps the complete BIM process in bridge projects – an innovation in the industry**. This further

improves the design process in terms of both time and quality.

With Allplan Bridge, a completely new platform has been created that is designed for the simplest possible operation and efficient workflows. By using a common bridge model for structural analysis and design instead of two separate ones, interdisciplinary cooperation is improved. The parametric model and the extensive automation of work steps drastically reduces the time required for processing, especially for design changes that were previously extremely time-consuming and error prone. Allplan Bridge is a new generation BIM solution that will change the way bridge projects are designed and executed.

Dr. Detlef Schneider, CEO of ALLPLAN: "A solution like Allplan Bridge, developed from scratch, opens up completely new horizons and options. We use this unique opportunity to bring together the previously separate worlds of modeling, structural analysis and design. With our team, we are in an excellent position to continuously develop Allplan Bridge further."

"Another milestone on this path is the newly developed code-based design system that fills the missing gap in the BIM process", adds Gregor Strekelj, Product Manager at ALLPLAN Infrastructure. "With Allplan Bridge 2021, our customers can look forward to improvements in all areas, in modeling, structural analysis, reinforcement design and detailing as well as openBIM interfaces. I am very proud of the entire team."

New in Allplan Bridge 2021

Improved modeling

Allplan 2021 makes modeling even more precise and timesaving. For example, it is possible to interactively move stations and display the cross-section at any point along the structure. Furthermore, using a longitudinal eccentricity for the tendon point definition minimizes the necessary definition of stations.

Earthquake Load

Allplan Bridge 2021 uses the multi-mode Response Spectrum Method for evaluating the effects of seismic loading. The solution consists of two

separate tasks in the calculation procedure, firstly the determination of the relevant natural modes of the structural system and secondly the evaluation of the response spectrum prescribed in the design code.

Code-Based Design

Once the global effects are calculated and the relevant envelopes have been created the user can perform code dependent design tasks to determine the required reinforcement content. After the reinforcement area has been calculated or manually specified, ULS and SLS checks can be performed according to EN code, and ULS flexural capacity checks also according to AASHTO LRFD.

Creep, Shrinkage and Relaxation for international markets

Particularly important for the construction stage analysis of prestressed and reinforced concrete structures is the correct consideration of the time-dependent effects. In Allplan Bridge the calculation of creep and shrinkage of concrete and relaxation of prestressing steel is code-compliant and now also available for Chinese and Korean Standard.

New development location in the Czech Republic

Allplan Bridge has been successfully on the market since April 2018 and is now used by several hundred users in 31 countries on four continents for bridge design. The BIM solution was developed from scratch by proven bridge construction experts from Graz. Last year, a second site with seven experienced bridge construction specialists was established in Brno/Czech Republic under the management of Jaroslav Navrátil. Here - in close cooperation with the specialists in Graz - the functionality for code-based design and for reinforced and prestressed concrete was developed.

Jaroslav Navrátil comments: *“Bridges, especially prestressed concrete bridges, are the center of my professional life. This is why I followed the development of Allplan Bridge as a new bridge construction solution with such fascination. When the opportunity arose to participate in the development of Allplan Bridge, I did not hesitate for long. We set up a new team in Brno, we developed new methods for code-based design that we programmed and together with the development team in Graz we linked it to the analysis and reinforcement detailing in the best*

possible way.”

Availability:

Allplan Bridge 2021 as well as the free 30-day trial version are now available for download.

For more information, please visit: WWW.ALLPLAN.COM/BRIDGE2021

About the Nemetschek Group

The Nemetschek Group is a pioneer for the digital transformation in the AEC industry. With its software solutions, it covers the complete life cycle of building and infrastructure projects and guides its customers into the future of digitalization. As one of the world's leading corporate groups in this field, the Nemetschek Group increases quality in the construction process and improves the digital workflow of all those involved in the construction process. This revolves around the use of open standards (Open BIM). The innovative solutions of the 16 brands in the four customer-oriented divisions are used by approximately six million users worldwide. Founded by Prof. Georg Nemetschek in 1963, the Nemetschek Group today employs more than 3,000 experts.

Publicly listed since 1999 and quoted on the MDAX and TecDAX, the company achieved revenue in the amount of EUR 556.9 million and an EBITDA of EUR 165.7 million in 2019.

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